

NOTE: IF PRINTED CIRCUIT BOARDS ARE DOUBLE SIDED,  
COMPONENTS MUST BE SOLDERED TOP AND  
BOTTOM FOR PROPER OPERATION.

MOOG MUSIC INC.  
996-041977-001

## **PERCUSSION CONTROLLER (MODEL 1130)**

### **TEST PROCEDURE**

#### **DESCRIPTION**

The Percussion Controller is a modified drum that produces two control voltages and two triggers, "S" and "V". The tests described herein are accomplished with the aid of a Moog Synthesizer such as a Minimoog, Micromoog, Multimoog or Sonic VI.

#### **PRELIMINARY**

1. Connect DC Oscilloscope and Digital Voltmeter (DVM) to the control output voltage (CV No. 1) output jack of the Percussion Controller.
2. Connect the six (6) pin Cinch-Jones connector to the accessory outlet on any Moog Synthesizer.

#### **TEST PROCEDURE**

1. Set SCALE and SENSITIVITY controls on Percussion Controller to "10" (fully clockwise).
2. Strike drum head and note reading on DVM. Slowly rotate the SCALE control toward "0" (counterclockwise). Output voltage should decrease to zero.

3. Set SCALE control to "10" (fully clockwise). With Moog Synthesizer operating at +15 volts, check output voltage for compliance with the following:

LIGHT TAP	50 to 200mV
HARD STRIKE	5 to 8.5 volts

#### **NOTE**

Allow a 33% reduction in these voltages if the Synthesizer has a 10VDC power supply.

4. Place oscilloscope, alternately, on "S" and "V" TRIGGER outputs. Strike drum head and observe that a trigger signal is present.
5. Strike drum head repeatedly while reducing the setting of the SENSITIVITY control. Note the increase of strike force required to produce a trigger. No trigger should be produced with SENSITIVITY control at "0".
6. Repeat the above procedural steps for control output voltage No. 2.
7. Disconnect the Oscilloscope and Digital Voltmeter and connect the output of the Percussion Controller to the Synthesizer and check the response in accordance with the owners manual.

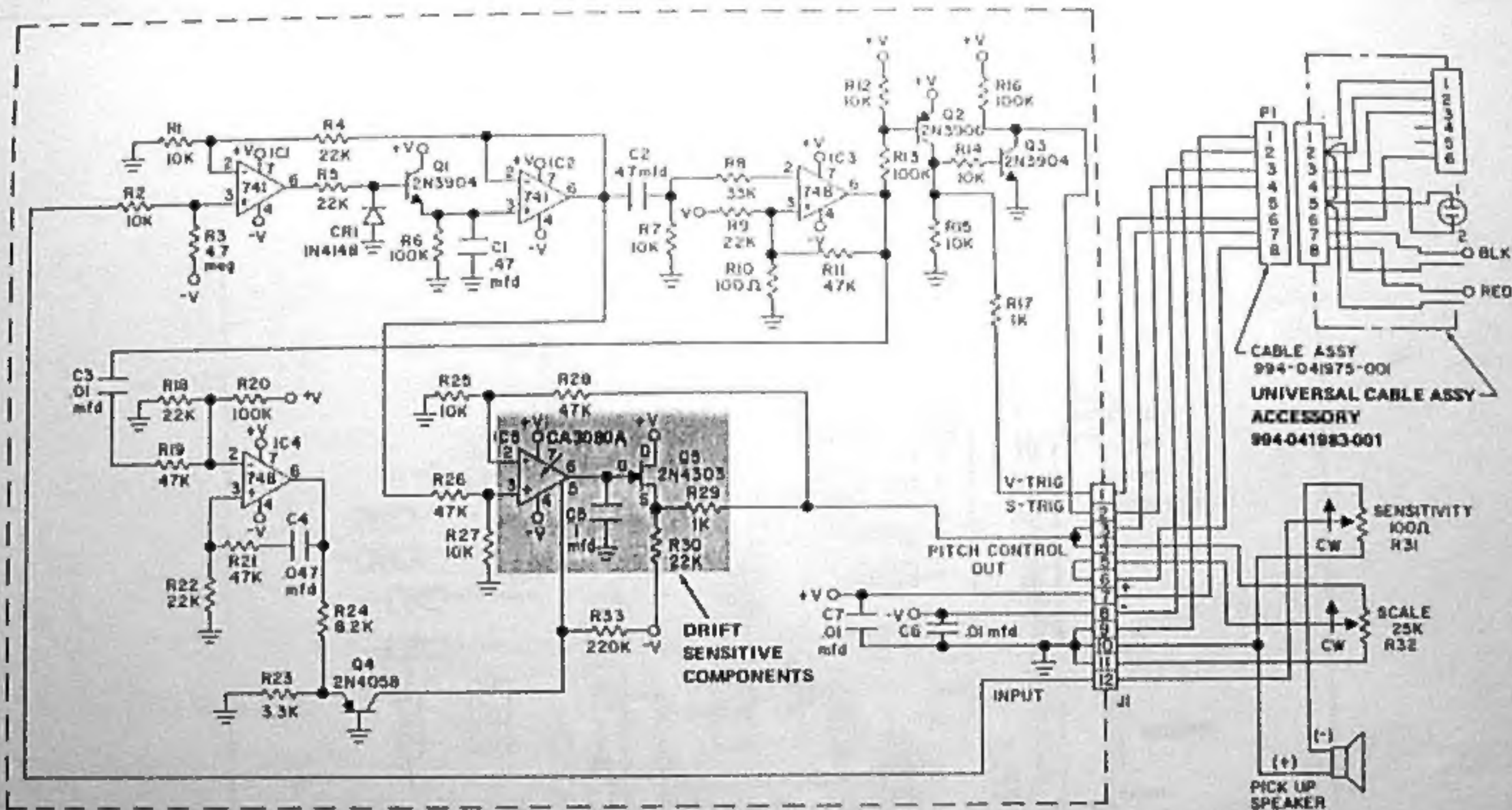


PERCUSSION CONTROLLER (MODEL 1130) PRINTED CIRCUIT BOARD  
REPLACEMENT PARTS LIST

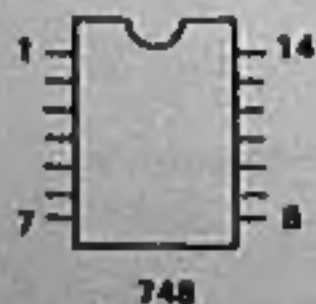
REF DESIG	PART NUMBER	DESCRIPTION	QTY
	096-041077-001	Printed Circuit Board Assembly consisting of:	
	010-041719-012	Connector, Locking, 12 Pin	1
C1,C2	046-040100-474	Capacitor, Mylar, 0.47uf	2
C3	046-041078-103	Capacitor, Polyester, 0.01uf	1
C4	046-041078-473	Capacitor, Polyester, 0.047uf	1
C5	046-040226-105	Capacitor, Polyester, 1uf	1
C6,C7	047-040200-103	Capacitor, Ceramic, 0.01uf, 50V	2
CR1	019-041075-001	Diode, Signal, 1N4148	1
IC1,IC2	091-041101-001	Integrated Circuit, Operational Amplifier, General Purpose, 741	2
IC3,IC4	091-041115-001	Integrated Circuit, Operational Amplifier, General, Uncompensated, 748	2
IC5	001-041089-001	Integrated Circuit, 3080A, TO-5	1
R1,R2, R7,R12, R14,R15, R25,R27	852-512103-001	Resistor, Carbon Film, 10K, ± 5%, 1/2W	8
R3	852-513475-005	Resistor, Carbon Film, 4.7 Megohm, ± 10%, 1/2W	1
R4,R5, R9,R18, R22,R30	852-512223-001	Resistor, Carbon Film, 22K Ohms, ± 5%, 1/2W	6
R6,R13, R16,R20	852-512104-001	Resistor, Carbon Film, 100K Ohms, ± 5%, 1/2W	4
R8	852-512333-001	Resistor, Carbon Film, 33K Ohms, ± 5%, 1/2W	1
R10	852-512101-001	Resistor, Carbon Film, 100 Ohms, ± 5%, 1/2W	1

PERCUSSION CONTROLLER (MODEL 1130) PRINTED CIRCUIT BOARD  
REPLACEMENT PARTS LIST (Continued)

REF DESIG	PART NUMBER	DESCRIPTION	QTY
R11,R19, R21,R26, R28	852-512473-001	Resistor, Carbon Film, 47K Ohms, ± 5%, 1/2W	5
R17,R29	852-512102-001	Resistor, Carbon Film, 1K Ohms, ± 5%, 1/2W	2
R23	852-512332-001	Resistor, Carbon Film, 3.3K Ohms, ± 5%, 1/2W	1
R24	852-512823-001	Resistor, Carbon Film, 8.2K Ohms, ± 5%, 1/2W	1
R33	852-512224-001	Resistor, Carbon Film, 220K Ohms, ± 5%, 1/2W	1



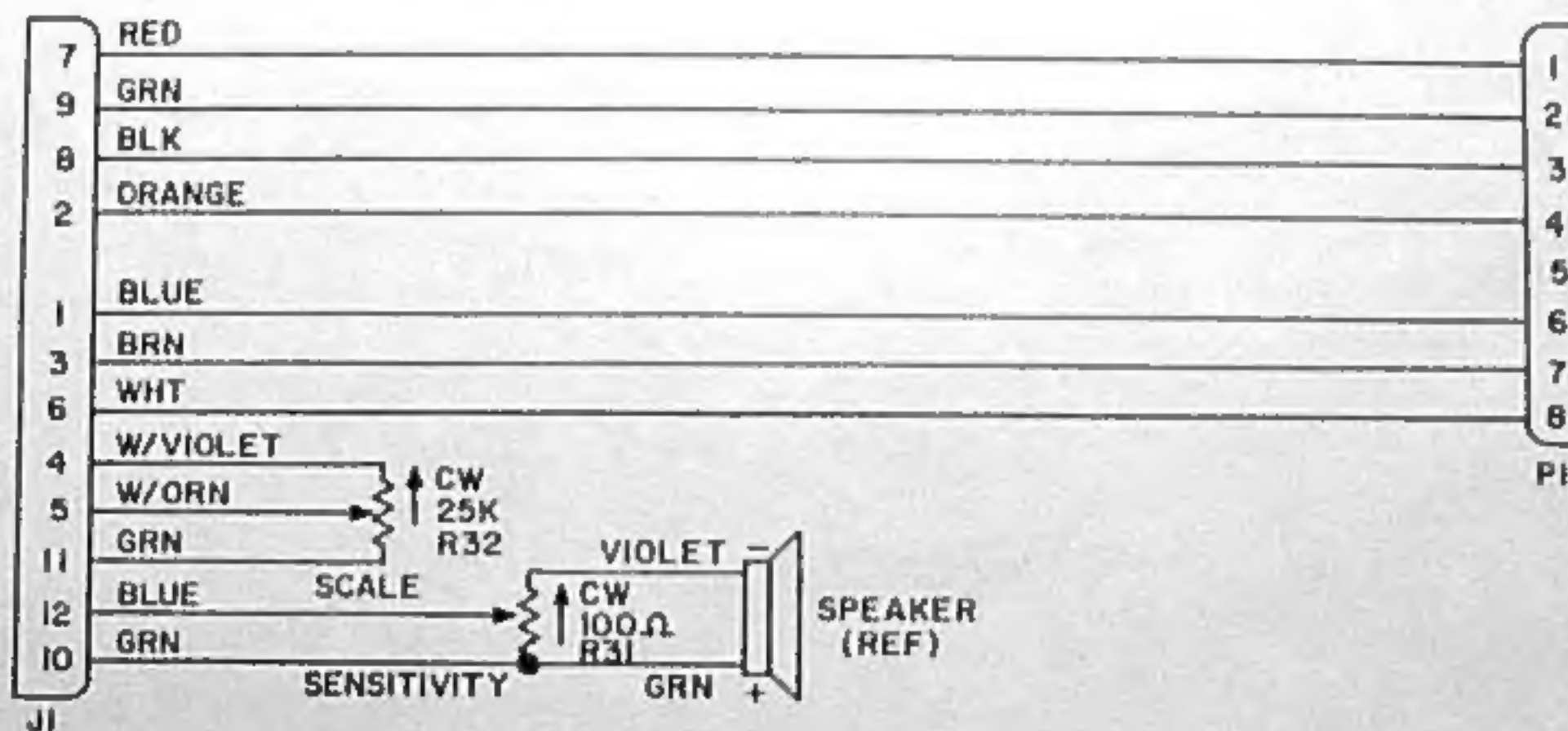
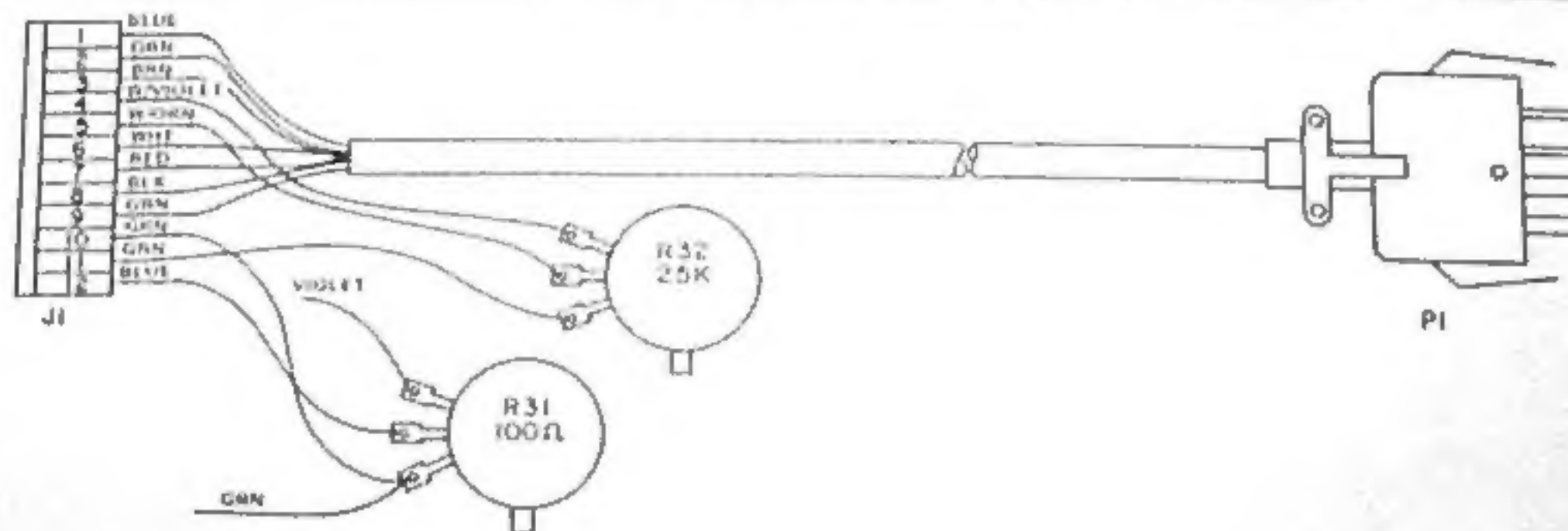
COMPONENT BASING  
(TOP VIEWS)



NOTE: SOME VERSIONS OF THIS SCHEMATIC MAY VARY  
SLIGHTLY FROM THAT SHOWN HERE.

MOOG MUSIC INC.  
093-041975-001





#### REPLACEMENT PARTS LIST

REF DESIG	PART NUMBER	DESCRIPTION	QTY
J1	994-041974-001	Cable Assembly consisting of:	
P1	910-041718-012	Connector, 12 Pin	1
R31	910-041709-008	Connector, 8 Pin	1
R32	925-040294-006	Resistor, Variable, 100 Ohm	1
	925-040294-001	Resistor, Variable, 25K Ohm	1

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